Amendments to the Claims:

Listing of Claims:

The following listing of claims replaces all previous listings or versions thereof:

1-13. (cancelled).

14. (Currently amended) ~~An assay~~ A method for selecting a compound ~~useful for treating epilepsy or other neurological disorders~~ which ~~modulates inactivation~~ reduces an activity of a SCN3A sodium channel comprising:

(a) contacting a composition comprising ~~an SCN3A nucleic acid sequence which encodes~~ [[an]] a SCN3A sodium ion channel ~~or a functional fragment thereof~~ protein with a test compound; ~~and~~

(b) assaying ~~a function~~ the activity of the ~~said~~ sodium ion channel in the presence of the test compound;

(c) comparing the activity of the sodium ion channel in the absence of said test compound;

(d) selecting a compound which reduces the activity of the sodium ion channel as compared to the activity of the sodium ion channel in the absence of the test compound;

wherein said SCN3A protein is selected from the group consisting of~~a compound is selected when a difference is observed between the inactivation of said sodium channel in the presence of a test agent, as compared to in the absence thereof~~

(i) an amino acid sequence set forth in SEQ ID NO:67; and

(ii) a SCN3A protein expressed by a SCN3A nucleic acid sequence having at least 95% identity to the nucleic acid sequence as set forth in SEQ ID NO:65.

15-33. (cancelled).

34. (New) The method of claim 14, wherein the method is used for selecting a compound capable of reducing voltage-gated ion channel activity of a human SCN3A protein associated with idiopathic generalized epilepsy (IGE).

35. (New) The method of claim 14, wherein the method is used for selecting a compound capable of reducing voltage-gated ion channel activity of a human SCN3A protein associated with generalized epilepsy with febrile seizures.

36. (New) The method of claim 14, wherein the test compound is a library of test compounds.

37. (New) The method of claim 14, wherein a SCN3A nucleic acid encoding the SCN3A protein is comprised in an expression vector.

38. (New) The method of claim 37, wherein the expression vector is comprised in a cell.

39. (New) The method of claim 14, wherein the assaying is performed with a whole cell.

40. (New) The method of claim 14, wherein the ion channel activity is:

(i) voltage dependence activation;

(ii) voltage dependence of steady state level of inactivation;

(iii) time course of inactivation;

(iv) the number or fraction of channels available for opening;

(v) change in current;

(vi) flux of ions through the channel;

(vii) phosphorylation of channel;

(viii) binding of molecules to the channel; or

(ix) induction of a second cellular messenger.

41. (New) The method of claim 40, wherein the flux of ions through the channel is assessed by:

(i) fluorescence resonance energy transfer (FRET)-based voltage sensor assay;

(ii) dibasic dyes;

(iii) ^{14}C-guanidine;

(iv) two electrode voltage clamp; or

(v) patch-clamp.

42. (New) The method of claim 40, wherein the binding of molecules through the channel is assessed by surface plasmon resonance.

43. (New) The method of claim 14, wherein the method is used for selecting a compound which reduces the hyperexcitability state of a SCN3A ion channel.

44. (New) The method of claim 14, wherein SEQ ID NO. 67 is encoded by a nucleic acid.

45. (New) The method of claim 14, wherein a SCN3A nucleic acid sequence comprises a sequence selected from the group consisting of SEQ ID NOs: 400-408.

46. (New) The method of claim 45, wherein a SCN3A protein comprises a Val1035Ile mutation.

47. (New) The method of claim 45, wherein a SCN3A protein comprises a Asn43DEL mutation.